Covering Your Glass

PEOPLE IN GLASS HOUSES might not throw stones, but they do need a way to keep the windows from shattering. Enter a high-performance structural sealant from Dow Corning that has proven to be a key component in new laminated glass designs.

According to the company, these designs are helping to reduce potential injury to building occupants and passersby through durable impact-resistant glazing systems.

Critical properties include the silicone formulation's high tensile and tear strength as well as its excellent adhesion to glass and common window frame materials. The result is a window system that delivers dramatically increased protection from hurricanes and tornadoes, criminal trespass and even bomb blasts.

Whether factory laminated or retrofitted on-site, impact-resistant window systems drastically reduce the potential for flying glass in an emergency situation, helping to eliminate one of the leading causes of injury, the company said. Information provided by Dow Corning revealed that in addition to its high strength, Dow Corning 995 Silicone Structural Sealant delivers long-term flexibility and outstanding resistance to harsh weather, extreme temperatures and UV exposure.

The formulation maintains positive adhesion, even when window frames bend or twist under impact, wind load or other stressful conditions.

"This sealant is the anchor point in the most advanced window systems in the industry," said Dow Corning Senior Technical Service Specialist Bill O'Brien. "Protective glazing systems incorporate a shatter resistant glazing infill (such as a laminated glass or glass with a protective polyester film) with an attachment system such as Dow Corning 995 Silicone Structural Sealant, which keeps the infill attached to the frame, even after a severe impact."

Dow Corning 995 Silicone Structural Sealant is a one-component, self-priming formulation that cures to a tough, elastomeric solid specifically designed for structural glazing. The company claims the material has demonstrated excellent unprimed adhesion to most common building substrates, including reflective glass, anodized aluminum, granite and painted surfaces (including most fluoropolymers).

Dow Corning 995 Silicone Structural Sealant is virtually unaffected by exposure to sunlight, rain, sleet, snow or extreme temperatures. It retains its design properties even after years of exposure, forming a weathertight bond that can be warranted for 20 years.

Dow Corning develops, manufactures and markets a range of silicon-based materials. Currently offering more than 10,000 products to customers around the world, the company specializes in silicon-based technology, with shares equally owned by The Dow Chemical Co. and Corning Inc. More than half of Dow Corning's sales are outside the United States.